

Monitoring Data Record

Project Title: R-2809B (Site 1) COE Action ID: 199601836
 Stream Name: UT to Richland Creek DWQ Numbers: 010550
 City, County and other Location Information: Wake Forest Bypass, Wake Co. (Left of Y2 Sta. 10+40 to Sta. 11+25)
 Date Construction Completed: April 2006 Monitoring Quarter: (3) of 4
 Ecoregion: _____ 8 digit HUC unit: 03020201
 USGS Quad Name and Coordinates: _____

Rosgen Classification: _____

Length of Project: 384' Urban or Rural: Urban Watershed Size: _____

Monitoring DATA collected by: M. Green Date: 11/15/06

Applicant Information:

Name: NCDOT Roadside Environmental Unit

Address: 1425 Rock Quarry Rd. Raleigh, NC 27610

Telephone Number: (919) 861-3772 Email address: mlgreen@dot.state.nc.us

Consultant Information:

Name: _____

Address: _____

Telephone Number: _____ Email address: _____

Project Status: Complete

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level (1) 2 3

Monitoring Level 1 requires completion of *Section 1, Section 2 and Section 3*

Permit States: The permittee will visually monitor the vegetative plantings on all mitigation streambanks to access and insure complete stabilization of the mitigation stream segments. This monitoring will include adequate visual monitoring of planted vegetation for a minimum of one year after final planting, and appropriate remedial actions (e.g., replanting, streambank grading, ect.). If within any monitoring year, bank stabilization is not acceptable as determined by the Corps of Engineers, and remedial action required by the Corps of Engineers is performed, the two year monitoring of the affected portions of the stream will begin again.

Section 1. PHOTO REFERENCE SITES

Total number of reference photo locations at this site:

4 photo point locations - 2 photos at each location

Dates reference photos have been taken at this site: 5/10/06, 8/22/06, 11/15/06

Individual from whom additional photos can be obtained (name, address, phone): _____

Other Information relative to site photo reference: _____

If required to complete Level 3 monitoring only stop here; otherwise,

Section 2. PLANT SURVIVAL

Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):

A rainfall event of approximately 7 inches (Tropical Storm Alberto, June 2006) occurred shortly after construction. Some of the planted vegetation was washed away during this event.

Estimated causes, and proposed/required remedial action:

Supplemental plantings will be installed during the next planting window.

ADDITIONAL COMMENTS: Vegetation is dormant for the 3rd Quarter of monitoring. Live stakes and bareroot seedlings noted on the streambank and in the floodplain consisted of black willow, silky dogwood, green ash, swamp chestnut oak, willow oak, and laurel oak.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

The 3rd Quarter monitoring evaluation was conducted in November 2006. A rainfall event of approximately 7 inches (Tropical Storm Alberto, June 2006) occurred shortly after construction. Some of the planted vegetation was washed away during this event. Localized bank erosion and erosion behind some of the cross vane arms was still noted during this monitoring evaluation. Point bars have developed where the banks have eroded helping the stability of the stream. Deposition has occurred behind some of the exposed cross vane arms. NCDOT will continue to monitor this stream.

Date Inspected	Station Number	Station Number	Station Number	Station Number	Station Number
Structure Type	Photo 1	Photo 3	Photo 5	Photo 6	
Is water piping through or around structure?			Water piping around left arm of cross vane		
Head cut or down cut present?					
Bank or scour erosion present?	Erosion on left bank	Erosion on right bank	Erosion on right bank	Erosion on left bank	
Other problems noted?		Erosion behind right arm of cross vane	Erosion behind right and left arms of cross vane	Erosion behind left arm of cross vane	

NOTE: Attach separate narrative sheets to each monitoring report describing/discussing the overall monitoring results. Include the identification of specific problem areas/channel failures, estimated cause and proposed/required remedial action. This should include a brief discussion of any parameter that has changed significantly from as-built.

Wake Forest Bypass



Photo 1 (Upstream)



Photo 2 (Downstream)



Photo 3 (Upstream)



Photo 4 (Downstream)



Photo 5 (Upstream)



Photo 6 (Downstream)

Wake Forest Bypass



Photo 7 (Upstream)



Photo 8 (Downstream)